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An old solution to the problem of mixed atomics

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Abstract

This paper examines a difficulty for various forms of truth pluralism, known in the literature as the problem of ‘mixed atomics’. It is argued that two prominent attempts to respond to the difficulty – those of Jeremy Wyatt and Gila Sher – fail. In their place, an alternative is offered based on parts of Crispin Wright’s *Truth and Objectivity* programme. It is argued that the Wrightian approach works because it substitutes traditional conceptions of truth-relevant properties, for example correspondence and coherence, for criteria of objectivity pertaining to discursive practices. This allows us to give expression to the nuanced way in which the pluralist wants to treat mixed atomics.

Keywords: Truth pluralism, mixed atomics, Jeremy Wyatt, Gila Sher, Crispin Wright.

1. INTRODUCTION

An increasing number of thinkers have been drawn to the idea that propositions can be true in different ways. This paper will look at three such types of view and evaluate how they might deal with the problem of mixed atomics. First, it will consider a view here dubbed *Defaultism*, based on some recent work by Jeremy Wyatt; second, it will look at a view here called *Factorisation* based on Gila Sher's work; and finally, it will look at a view that corresponds to certain strands in Crispin Wright's *Truth and Objectivity* project, which will here be called *Discursivism*. It will be argued that the latter comes out on top.

2. CLARIFYING THE PROBLEM

The basic form of the problem of mixed atomics is now reasonably familiar, and is best introduced by way of example. Consider, then,

I believe some cavepeople might have been better parents if they'd spent less time hunting and gathering.

This proposition is mixed insofar as it seems to cover a variety of subject matters (domains) that have traditionally been of interest to the realism debate—the remote past, modality, material objects, values and first-person psychological reports. It is atomic in the sense that it doesn't break down via an application of the rules for truth-functional connectives into simpler

propositions that are themselves apt for truth, by analogy with the way that, say, truth-functional conjunctions break down. This is not to deny that it is ‘complex’ in other equally valid senses of the term. Specifically, it contains discrete semantic parts. The point, to reiterate, is simply that no proper part of the proposition is truth-apt, though the proposition itself is.

Cases like the above present a *prima facie* problem for truth pluralists: what does it take for the propositions in question to be true? The guiding pluralist thought is that propositions about different subject matters ought to be true in different ways. But here we seem to have different ways competing for eligibility.

The precise form that the problem takes will depend upon various surrounding assumptions, and since these are seemingly open-ended, it will not be worthwhile trying to taxonomise them in advance. It will, however, be useful to think a little more than is customarily done about the sources of admixture.

1. It is tempting to align particular predicates with particular domains. But often we need the same bound variable to occur with predicates that one would intuitively align with different domains. So, for example, suppose that we were to align ‘is a dog’ with one domain, and ‘is friendly’ with another. We would then be able to form the proposition, $\langle \text{There exists a dog that is friendly} \rangle$. But, of course, this is of the form, $\exists x(Fx \wedge Gx)$, which cannot be broken down into two distinct, truth-apt atomic propositions, one containing only ‘F’ and one containing only ‘G’.

2. English nouns and adjectives often qualify each other ('bad father', 'bad health-service', 'bad thief') to create predicates apparently straddling different domains. We can then use these predicates to express mixed propositions, e.g. <Bob is a bad father>.¹

3. So-called 'thick' terms, like 'courageous', engage with different domains and yet cannot be analysed into different predications made by distinct propositions.²

4. Some commitments, for example temporal and modal distinctions, are best understood in terms of propositional operators or different ranges of quantification, which quite obviously do not themselves amount to complete propositional contents, but rather features of propositions that possess content intuitively concerning different subject matters. So, for example, the proposition, <Jim might have eaten more cakes>, does not break down to distinct propositions about modality on the one hand and cakes on the other.

5. Depending on one's background semantic theory, certain types of directly referring expression will cause problems. Names, like 'Tom', if their semantic value is just their referent, i.e. Tom, presumably take Tom *warts and all*, with his moral, mathematical and physical characteristics. So, for example,

¹See Geach 1956 for an early but still pertinent discussion of these issues, in addition to the voluminous literature in more contemporary semantics.

²Or so it may seem. For a recent attempt to analyse thick terms in ethics see Elstein and Hurka 2009. For a recent attempt to show that they are non-evaluative see Väyrynen 2013.

if we say that Tom is good, not only do we speak ethically, but we also presuppose the sum total of his existence, whatever that involves—that he is human, that he is singular, and so on. Similarly, perhaps, for indexicals and pronouns and other terms that take their referents as semantic value.

The problem of mixed atomics, then, is at its base perhaps a collection of sub-problems. A single unified solution would be desirable, but failing this, pluralists could try to offer a collection of responses to individual dimensions of admixture. The thing to avoid, of course, would be offering solutions that only work in a small number of instances and simultaneously thinking that one had offered a general template for a solution. With that in mind, let us turn to three ways in which one might try to respond to the problem.

3. OPTION 1: DEFAULTISM

The first strategy has been proposed by Jeremy Wyatt (2012). In order to understand it fully we need to say a little more about Wyatt’s understanding of truth pluralism.

Wyatt’s truth pluralist operates in a broadly Lynch-like fashion (Lynch 2009). He holds that some truth bearers are true in virtue of possessing a substantive correspondence property, and others are true in virtue of possessing a substantive coherence property. He describes those properties further in the following terms:³

³On Wyatt’s line, there are just these two, mutually exclusive, kinds, but in principle one could extend the solution to as many sorts as one thought there were.

One of these is a representational, correspondence property which can be taken, following Field, to be underwritten by a causal theory of reference. The other is an epistemic, coherence property, which is more nuanced than, though in the tradition of, the coherence properties which figures such as Blanshard and Joachim have taken to be identical to truth. (p.2)

The solution to the problem of mixed atomics is then to lay down a rule, such that mixed propositions require a unique property as a function of their membership of certain (multiple) domains. The rule is, in outline, that propositions take correspondence as a default value unless certain conditions obtain, in which case they take coherence.

In more detail, the view works by way of an initial division of concepts. We can here call them the ‘correspondence-inclining’ and ‘coherence-inclining’ concepts. Those concepts are aligned with particular domains in an intuitive way, such that, for example, the coherence-inclining concepts might align with the evaluative domain and the correspondence-inclining concepts might align with the naturalistic domain. On Wyatt’s view, the rule is then:

DEFAULTISM: Propositions take correspondence unless they are composed even partly of coherence-inclining concepts, in which latter case they take coherence.

A toy example will serve as an illustration. Suppose for example that <Bob

is a father> takes correspondence, for it is only composed of correspondence-inclining concepts, but <Bob is a *good* father> takes coherence, because it is also partly composed of a coherence-inclining concept.

Defaultism has a certain *prima facie* plausibility. That there should be some rule or other determining the relevant type of truth property, and that it should be grounded in the semantic components – viz., concepts in Wyatt’s framework – of the proposition, seems overwhelmingly plausible given the set-up of the problem. The precise rule the Defaultist gives is then to be informed by the background conception of the truth properties, i.e. as correspondence and coherence. The idea behind this way of laying down the rule appears to be that whilst being a father is a matter that depends solely on the world, being a good father does not.⁴ The only other option for the Defaultist, then, is that its truth depends on the possession of coherence.

3.1. THE TROUBLE WITH DEFAULTISM

The problem with Defaultism, as it stands, is that the rule seems to solve the problem by fiat rather than by dealing with the underlying difficulty. In its simplest form, the objection can be put as follows: it is all very well to assign the coherence property as the relevant truth property, but that simply ignores the role played by the term ‘father’. For whether or not Bob is a father depends *ex hypothesi* on the way the world is, even if we are also deeming him to be a *good* father. Indeed, it is clear that both the mixed,

⁴I’m here taking the term ‘father’ as non-evaluative. If this is seen as question-begging, then consider perhaps <The Mona Lisa is a painting> and <The Mona Lisa is a good painting>.

partly evaluative proposition and the unmixed, non-evaluative proposition require *exactly* the same thing of the world. Now, if the way in which that requirement is satisfied in the first case is by correspondence, then we need an account of why correspondence is not required in the second case. It will not do simply to say that correspondence is too strong a requirement given that the new proposition also contains an evaluation, for that is merely to remind us of the problem we started with. That is to say, we needed to make sense of how a proposition that intuitively mixes different sorts of content could be assigned, in some principled way, a single truth type. What the proposed solution really shows is that we are in a bind: insofar as we view the proposition as both describing the world and making an evaluation we are inclined to view the proposition both as requiring correspondence and ruling it out.⁵

Matters are no better if we try to lay down the contrasting rule, that the propositions in question take coherence unless they are partly composed of correspondence-inclining concepts, in which case they take correspondence. This is because we have no solid conception of how such a proposition could be anything but vacuously false if it required for its truth a worldly condition. To wit—if there aren't values in the world, then making mixed, evaluative

⁵It is worth here noting the similarities and differences with a traditional problem for coherence theories of truth, viz. that they cannot in general adequately express the idea of a worldly constraint on truth. Now, supposing that this problem had a general solution, it might be open for the pluralist to argue that the mixed atomic poses no difficulty, since the world-constrainedness of the proposition in question would not be incompatible with it requiring only coherence, given that general solution. The problem, however, is that for the pluralist, as opposed to the monistic coherence theorist, correspondence is at least sometimes required precisely because there is a worldly condition in play. We would then need an additional explanation, not given by the general solution, as to why that condition did not, in the mixed case, require correspondence.

propositions depend on the world for their truth will leave them uniformly wanting.

The problem generalises. Whenever a proposition falls into multiple domains putatively associated (in unmixed cases) with different types of truth, we will be faced with competing demands upon it. In the end, there will need to be some rule as to what happens in these cases. But the difficult task is to explain how any such rule could be grounded in an account of the proposition and the sorts of truth-relevant properties it might possess. Defaultism, then, is more a reminder of the problem than a solution.

It might be argued, in defence of Defaultism, that the competing needs for correspondence and coherence are reconciled in the following way: given that the truth of the proposition, <Bob is a good father>, entails the truth of the proposition, <Bob is a father>, the former entails the truth of a proposition that requires correspondence, even if it does not itself require correspondence. In other words, supposing, in line with the initial Defaultist suggestion, we assign only coherence to the initial mixed proposition, we can still explain, indirectly, the way in which correspondence is derivatively required, thus satisfying the intuitive need for correspondence.⁶

However, the appeal to entailment cannot take us far. A proposition, A, entails another, B, when the truth of A guarantees the truth of B. But how could the fact that one proposition coheres guarantee that another must correspond? One depends on the world for its truth and the other does not. Such an entailment, as it stands, is as mysterious as the claim that

⁶And certainly, we explicitly block the absurdity of <Bob is a good father> being true (in virtue of coherence) without the worldly condition of Bob's being a father obtaining. I am grateful to an anonymous reviewer for suggesting this response.

the initial, mixed, proposition might be true in virtue of coherence whilst requiring the existence of a worldly condition.

4. OPTION 2: FACTORISATION

An alternative solution has been offered by Gila Sher. On her view, there is no way of assigning different truth properties to mixed atomics. Sher is not then a pluralist in the ordinary sense. But nor is she a monist of the ordinary sort. Rather, she believes that we need to theorise differently about different domains, but that the differentiations with respect to the ways in which sentences are true can only be seen by looking at the internal structure of those sentences. Specifically, she claims that we should accept an overarching substantive correspondence theory of truth, but differentiate between different ‘factors’ which determine correspondence in each case (Sher 1999, 2004, 2005, 2013, 2015). These might be typed, so that there are mental (M-) types, physical (P-) types, and moral (R-) types. So, for example, we might analyse ‘Causing pain is bad’ in terms of:

- (i) The P-fulfillment of ‘the causing of x’,
- (ii) The M-reference of ‘pain’,
- (iii) The R-satisfaction of ‘x is bad’.

Initially, the view appears attractive. Indeed, it might seem as though Factorisation preserves the good part of Defaultism whilst rejecting the bad part. That is to say, it retains the idea that different linguistic elements

relate differently to different subject matters, but does not require that we choose between competing truth properties. Rather, the differentiation that pluralists as a creed seek is only to be found, like good intentions, on the inside.

4.1. THE TROUBLE WITH FACTORISATION

However, the devil is in the details. The Factoriser is on fairly firm ground when dealing with some of the terms in question. For example, it is fairly easy to sketch a view about how some terms, for example, ‘proton’, or ‘Dave’ require the existence of certain physical entities in order for sentences containing them to be true or false. It is also relatively clear at the other extreme that certain, e.g. logical, terms, do not. But the proposal does not speak to all the sources that lead to mixed atomics. For example, consider the sentence, ‘Bob is a good father’. Here we have admixture brought about by predicate modification. What would the satisfaction type look like? At first pass, it will be:

(iv) The X -satisfaction of ‘ x is a good father’.

But that takes us no further. The mixture will percolate down to the satisfaction clause. The problem, of course, is that ‘is a good father’ is a mixed predicate.

How, then, might we factor out the plurality? We might do so by articulating the structure of the compound predicate, since we noted it as being the

product of an evaluative modifier – Good(X) – applied to a non-evaluative term. However, whilst such a move is formally admissible, its significance is unclear. What is the realism-relevant status that we might then accord to the modifier or indeed its product? It is not as though, for example, we can think of the modifier as marking a special type of (evaluative) property, for on its own it does not denote a property at all. Nor can we think of the compound property as purely evaluative. It is mixed, which is where our problems began.

It was noted in the first section of this paper that the problem of mixed atomics is perhaps better considered a collection of sub-problems, and in that vein we ought not necessarily to demand a unified solution. In that regard, it would be unfair to criticise Factorisation in its particular applications. It is possible, moreover, that it might be part of an eventual solution. But as noted earlier, the crucial mistake to avoid is to think that we have been offered a general template for a solution when we have not. In this case, we have not.

5. OPTION 3: DISCURSIVISM

Is there a better way? Yes. We will now consider a solution that takes its cues from certain strands of Wright’s *Truth and Objectivity* project. Wright has outlined a number of seemingly different approaches that a ‘truth pluralist’ might take, but I will here try to tease out one in particular, which we can call *Discursivism*. The important move here is to change the terms of the debate, away from traditional conceptions of truth-relevant properties,

as found in standard versions of the correspondence and coherence theories, and to think instead of language as a discursive practice governed by certain rules and answering to certain criteria of objectivity. These criteria can in turn be understood without appealing to the sorts of consideration underlying the traditional theories. If we follow Wright's lead, I suggest, we will see our way clear of the problem of mixed atomics.

For Wright, the guiding motivation behind the formulation of correspondence theories is the idea that truth ought to be strongly dyadic. On the one hand there is a representing subject, and on the other there is the world, and truth consists in the receptiveness of the former and the complicity of the latter. His own proposal is then to beef up each side of the dyad by way of two independently specifiable constraints, *cognitive command* and *wide cosmological role* (Wright, 1992, 175). I'll here deal with each in turn.

Cognitive Command: "[A] discourse exerts Cognitive Command if and only if it is a priori that differences of opinion formulated within the discourse, unless excusable as a result of vagueness in a disputed statement, or in the standards of acceptability, or variation in personal evidence thresholds, so to speak, will involve something which may properly be regarded as a cognitive shortcoming" (Wright, 1992, 144).

Cognitive command is supposed to reflect the idea that some discourses and not others purport to be genuinely representational. This being so, standards of correctness in those discourses integrate with the correct functioning of our representational apparatus, or more generally, the cognitive

mechanisms with which we apprehend the facts in question.

The interesting feature of cognitive command is that it appears to apply unproblematically to mixed atomics. This is because plausibly a rule of ‘weakening’ applies. Consider once again the proposition, <Bob is a good father>. If one is motivated by the thought that ethical discourse is non-representational in the way Wright tries to make precise, then one is likely to think that this mixed atomic will fail of cognitive command. For suppose that Jack and Jill are disagreeing over the proposition. Their disagreement may be only in regard to the evaluative matter, and thus their disagreement as a whole cannot aspire to greater objectivity than that which governs evaluative matters. This, at least, seems to be the way someone initially sympathetic to the view – i.e. prior to any specific concern with mixed atomics – ought to respond. When we consider the proposition purged of evaluative content, by contrast, i.e. <Bob is a father>, then there is nothing to prevent the imposition of cognitive command. This in turn indicates, rather elegantly, that it is something specific to the procedure of ethical evaluation that brings about the decrease in objectivity.⁷

It is worth here noting the parallel with the Defaultist proposal as discussed in the previous section. The Defaultist claim was that correspondence-apt propositions would degrade to coherence-apt propositions when evaluative content was added. The intuitions that guide us there are very close to those that guide us here. The problem for that view, however, was that

⁷As an anonymous reviewer has noted, this argument requires that we read Wright’s specification of cognitive command as ranging over all differences of opinion in the mixed case, i.e. with regard to each of its subject matters. This does, indeed, seem the most plausible interpretation.

we could not, on reflection, understand how the rule could be correct. Insofar as we remain wedded to the traditional correspondence and coherence properties, it does not make sense to say that the mixed proposition does not require something of the world, and thus correspondence, despite the rule telling us that it does not. In the present case, no such danger lurks. This is because on the Discursivist conception, the criterion in question is not characterised in terms of world-dependence, in the way standardly associated with correspondence. Rather, it is all a matter of discursive rules, which have come to replace the traditional conception. And there is no hint of paradox in the idea that the mixed proposition might not be governed by such strict rules as the those which govern one of its entailments—i.e. that Bob is a father.

We ought now to look at the other side of the coin, *wide cosmological role*. Its similarities and differences with cognitive command are instructive.

Wide cosmological role: Let the *width of cosmological role* of the subject matter of a discourse be measured by the extent to which citing the kind of states of affairs with which it deals is potentially contributive to things *other than*, or *other than via*, our being in attitudinal states which take such states of affairs as object (Wright, 1992, 196).

In the case of cognitive command, as we saw, something rather like a rule of weakening plausibly applies. If a proposition makes reference to a domain which intuitively aligns with anti-realism, then this makes the proposition anti-realist as a whole. Arguably, in the present case the opposite applies.

If we can cite, say, the presence of physical objects in an explanation the subject matter of which has a wide role, then presumably we can cite any more inclusive state of affairs in the same explanation. Suppose, for example, that we can cite the fact that Bob is a father in some explanation (e.g. of why some peculiar property of his genes will be passed on to another generation). Then it would seem that we can, albeit with some redundancy, also explain the relevant fact by saying that he is a good father. We give all the information required along with some that isn't.

In other words, it seems that Wright's own formulation of correspondence draws the sting from the problem of mixed atomics. It's worth making a few more points about how and why this is so.

5.1. NO PROBLEM FOR DISCURSIVISM?

The Wrightian solution here canvassed has the benefit that it appears to work in all instances. First, it appears to work whenever there is a syntactically tractable distinction of any kind. Why so?—because that very distinction is then used to mark the variation in objectivity, as then characterised by cognitive command and width of cosmological role. We saw, for example, how this worked with a predicate modifier, and it is relatively straightforward to see how a similar treatment might work with any distinctions conveyed by operators, e.g. modal or temporal distinctions. We would simply require a plausible rule as to how the realism-relevant feature was affected by the presence or absence of such operators. Second, the same goes even when there is no syntactic trace of the admixture, provided there is a

principled reason for the effect on the status, realistic or otherwise, of the resulting proposition. So, for example, even when dealing with a thick term like ‘brave’, one might rule that as a partly evaluative expression, it has a corrosive effect on cognitive command. None of this is to tell us what the rules are, of course, but the intuitions that motivate us towards pluralism of any kind should guide us here, and any failure we run into will not be a failure brought about by mixed atomics per se.

Those engaged in the debates around truth pluralism will of course require that something more be said about the account of truth itself on the above view, as opposed to the hallmarks of objectivity offered by cognitive command and wide cosmological role. My own view on this is not settled. However, some remarks are in order: first, it seems probable that the account favoured ought to be monist, since the motivations for being pluralist are, on the present line, better satisfied by other means. The question, then, is what kind of monist? The more Wrightian option here would, perhaps, be to take superassertibility as the central notion. This is premised on the idea, which Wright defends, that superassertibility can at least be formulated in such a way as to be coextensive with truth. If that is false, then an option that might be recommended, though foreign to Wright, is primitivism. On this view, truth would just be truth, and there would be little else to say about it by way of direct definition. Importantly, primitivism would still give us the unified overarching notion of truth – what Lynch calls ‘truth as one’ – whilst being sufficiently non-committal about its nature as to allow fecund multiplicity regarding discursive features like cognitive command and wide cosmological role. Resolving this question would, of course, ultimately

be settled in large part by reviewing the merits, not least of all internal coherence, of each view.⁸

6. CONCLUSION

The problem of mixed atomics is surprisingly stubborn. Several authors have constructed initially plausible and insightful attempts at its solution. But if what has been argued here is correct, they fail. Defaultism trades on the intuitive plausibility of its Default rule. But by virtue of its being wedded to traditional conceptions of correspondence and coherence it doesn't, in the end, work. Factorisation trades on the intuitively plausible idea that different syntactic elements signal different requirements for truth, but it is at best a solution of limited application. The Discursivist solution takes some of the virtues of these approaches and renders a fully general and cogent response to the problem. It does so by way of a fundamental reconception of the way we theorise about truth. It is clear that Wright did not intend that this strand in his writings would earn its keep as a solution to the problem of mixed atomics. But *Truth and Objectivity* has always been a repository of hidden treasures.

⁸The state of play as thus described is similar in large part to the view of Julian Dodd, as stated in his 2013 (s.3). Dodd argues, as is argued here, that we can be pluralists about Wright's criteria of objectivity without going in for truth pluralism. Dodd makes the further commitment that the deflationary, monist conception of truth is correct, whereas I here leave the door temporarily open to a broader range of monist options.

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